

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



aTD224  
.N2N48



States  
Department of  
Agriculture

Soil  
Conservation  
Service

Reno  
Nevada



# Nevada Water Supply Outlook

January 1, 1988



# Foreword

## How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

## For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

### Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

# **Nevada Water Supply Outlook**

**and**

## **Federal - State - Private Cooperative Snow Surveys**

### **Issued By**

Wilson Scaling  
Chief  
Soil Conservation Service  
Washington, DC 20013

### **Released By**

Charles Adams  
State Conservationist  
Soil Conservation Service  
Reno, Nevada 89502

### **Prepared By**

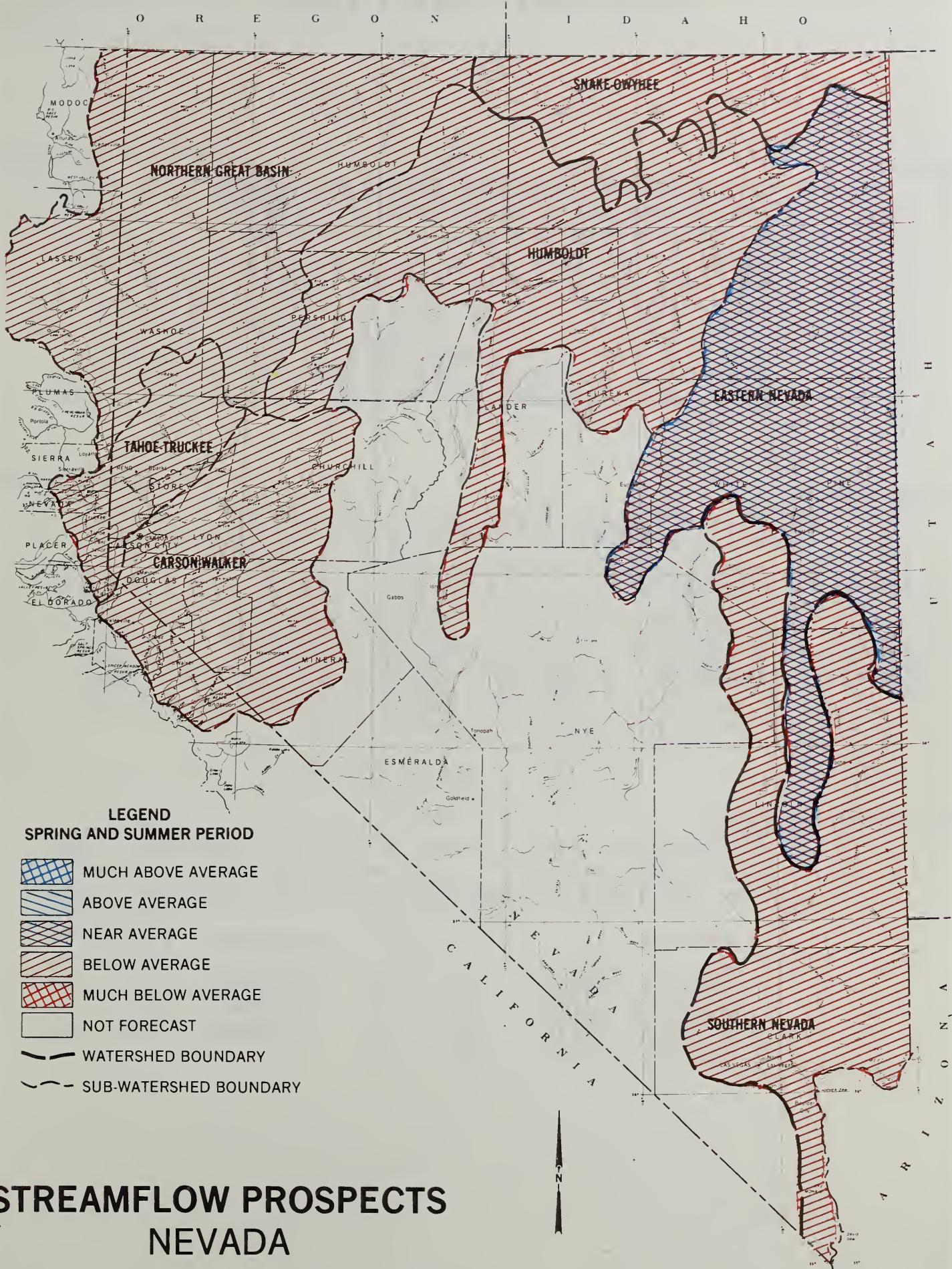
Chris Pacheco  
Water Supply Specialist  
Soil Conservation Service  
1201 Terminal Way, Second Floor  
Reno, Nevada 89502

### **In Cooperation With**

Roland D. Westergard  
Director  
Department of Conservation &  
Natural Resources  
Carson City, Nevada 89701

# TABLE OF CONTENTS

<b>State Streamflow Prospects Map-----</b>	<b>01</b>
<b>State General Outlook-----</b>	<b>02</b>
<b>Basin Outlook and Conditions</b>	
<b>Tahoe &amp; Truckee Basins-----</b>	<b>04</b>
<b>Carson &amp; Walker Basins-----</b>	<b>06</b>
<b>Humboldt Basin-----</b>	<b>08</b>
<b>Snake &amp; Owyhee Basins-----</b>	<b>10</b>
<b>Eastern Nevada-----</b>	<b>12</b>
<b>Northern Great Basin-----</b>	<b>14</b>
<b>Southern Nevada-----</b>	<b>16</b>
<b>Snow Data Measurements-----</b>	<b>18</b>
<b>Additional Information-----</b>	<b>21</b>



SOURCE: Data compiled by SCS  
Field Personnel.

APRIL 1985 4-R-39131

## GENERAL OUTLOOK

### SUMMARY:

ON JANUARY 1, SNOWPACK CONDITIONS RANGED FROM WELL BELOW AVERAGE TO ABOVE AVERAGE IN NEVADA. AREAS IN THE STATE RECEIVED SIGNIFICANT AMOUNTS OF SNOWFALL SHORTLY AFTER THE 1ST. PRECIPITATION FOR DECEMBER WAS WELL BELOW AVERAGE TO WELL ABOVE AVERAGE. PRECIPITATION SINCE OCTOBER 1 RANGED FROM WELL BELOW AVERAGE TO WELL ABOVE AVERAGE. RESERVOIR STORAGE ON THE LAST DAY OF DECEMBER WAS WELL BELOW AVERAGE. STREAMFLOW FORECASTS INDICATE WELL BELOW AVERAGE TO WELL ABOVE AVERAGE FLOWS DURING THE FORECAST PERIOD.

### SNOWPACK:

Snowpack conditions range from well below average in the western portion of Nevada to above average in the eastern and southern portions of the state.

BASIN	% OF AVG.	BASIN	% OF AVG.
TAHOE.....	60%	HUMBOLDT....	106%
TRUCKEE.....	73%	SNAKE.....	91%
CARSON.....	75%	OWYHEE.....	96%
WALKER.....	64%	ESTERN.....	119%
N. GREAT BASIN....	68%		

### PRECIPITATION:

December and year-to-date precipitation ranged from well below average to well above average. January precipitation is expected to be near to above normal.

BASIN(S)	1/1   YTD	BASIN(S)	1/1   YTD
	% OF AVG.		% OF AVG.
TAHOE & TRUCKEE	36   44	HUMBOLDT	26   58
CARSON & WALKER	34   41	ESTERN	28   61
N. GREAT BASIN	83   65	SOUTHERN	42   89
SNAKE & Owyhee	39   55		

**RESERVOIRS:**

Reservoir storage was well below average for most of Nevada. Southern Nevada had above average storage.

BASIN(S)	% CAPACITY	% OF AVERAGE
TAHOE & TRUCKEE.....	32%	64%
CARSON & WALKER.....	29%	54%
HUMBOLDT.....	30%	59%
SNAKE & Owyhee.....	27%	75%
SOUTHERN NEVADA.....	93%	127%
SEVEN MAJOR RESERVOIRS.....	30%	59%

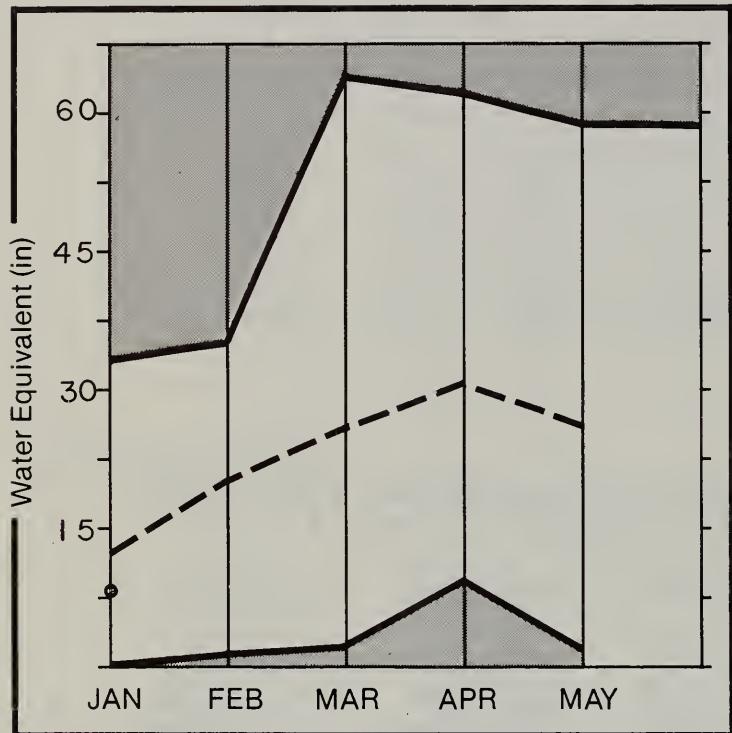
**STREAMFLOW:**

Streamflows in the state are forecast at well below average to well above average for the April - July forecast period.

BASIN(S)	% OF AVG.	BASIN(S)	% OF AVG.
TAHOE & TRUCKEE	70%-86%	HUMBOLDT	65%-98%
CARSON & WALKER	70%-83%	EASTERN	97%-109%
N. GREAT BASIN	60%-80%	SOUTHERN	84%-132%
SNAKE & Owyhee	71%-82%		

## TAHOE & TRUCKEE BASINS

**Mountain snowpack\*** (inches)



\*Based on selected stations

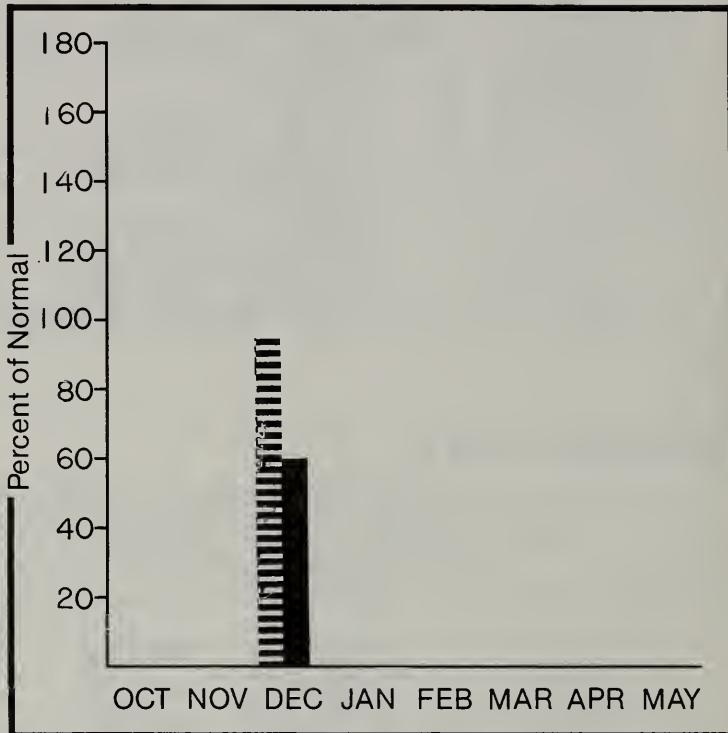
Maximum

Average

Minimum

Current

**Precipitation\*** (percent of normal)



\*Based on selected stations



Monthly precipitation



### **WATER SUPPLY OUTLOOK:**

Snowpack conditions are much better this year than last year but remain well below average. The Lake Tahoe Basin has about 60% of the January 1 average and 450% of the water content present last year at this time. The Truckee Basin presently has 73% of average and 447% of last year. December precipitation for the Tahoe-Truckee Basin was 94% of average and 563% of last year. Precipitation since October 1, 1987 is 59% of average and 479% of last year's total precipitation figures at this time. Reservoir storage is 64% of average. Total storage for Boca, Lake Tahoe, Prosser and Stampede is 334,500 acre feet. Streamflow forecasts indicate below average flows for the forecast period. The Truckee River at Farad is expected to flow at 84% of normal.

For more information contact your local Soil Conservation Service office.

## TAHOE &amp; TRUCKEE BASINS

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AUG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	PEAS. MAX. (1000AF)	PEAS. MAX. (% AVG.)	PEAS. MIN. (1000AF)	PEAS. MIN. (% AVG.)
LAKE TAHOE RISE (assume gates closed)	APR-HIG	1.5	1.1	74	2.0	135	1.0	68
TRUCKEE RIVER at Farad	APR-JUL	284.7	240.0	84	480.0	169	30.0	11
LITTLE TRUCKEE RIVER above Boca	APR-JUL	91.5	70.0	77	150.0	164	20.0	22
PYRAMID LAKE RISE (LOW 2/1/87)	LOW-HIG	1.2	0.7	64				
STEAMBOAT CREEK at Steamboat	APR-JUL	7.1	5.0	70	10.0	141	2.0	28
SAGEHEN CREEK, Ca	APR-JUL	6.5	5.6	86	11.0	169	2.0	31
GALENA CREEK nr Steamboat, Nv	APR-JUL	4.5	3.5	78	7.0	156	2.0	44

## RESERVOIR STORAGE

(1000AF)

## WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			AVG'D	LAST YR.
BOCA RESERVOIR	40.9	9.8	22.5	18.4	LAKE TAHOE RISE	14	468	59
LAKE TAHOE	744.6	228.4	479.5	375.8	TRUCKEE BASIN	13	492	70
PROSSER RESERVOIR	28.6	9.7	9.8	8.5	LITTLE TRUCKEE RIVER	3	330	74
STAMPEDE RESERVOIR	226.5	86.6	181.5	119.8	SAGE HEN CREEK	3	330	74
					GALENA CREEK	3	469	55
					STEAMBOAT DRAINAGE	3	589	64
					PYRAMID LAKE	27	481	65

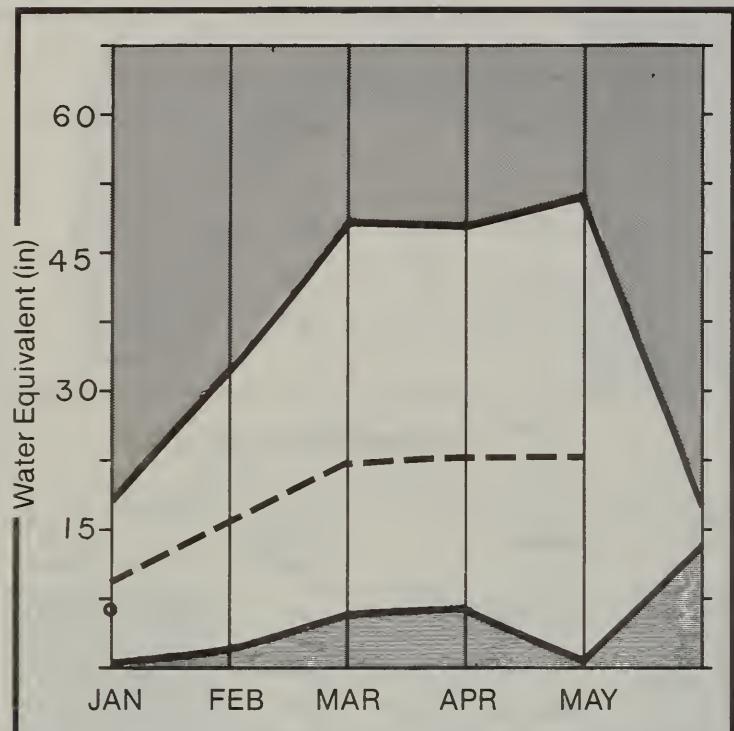
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

## CARSON & WALKER BASINS

**Mountain snowpack\*** (inches)



\*Based on selected stations

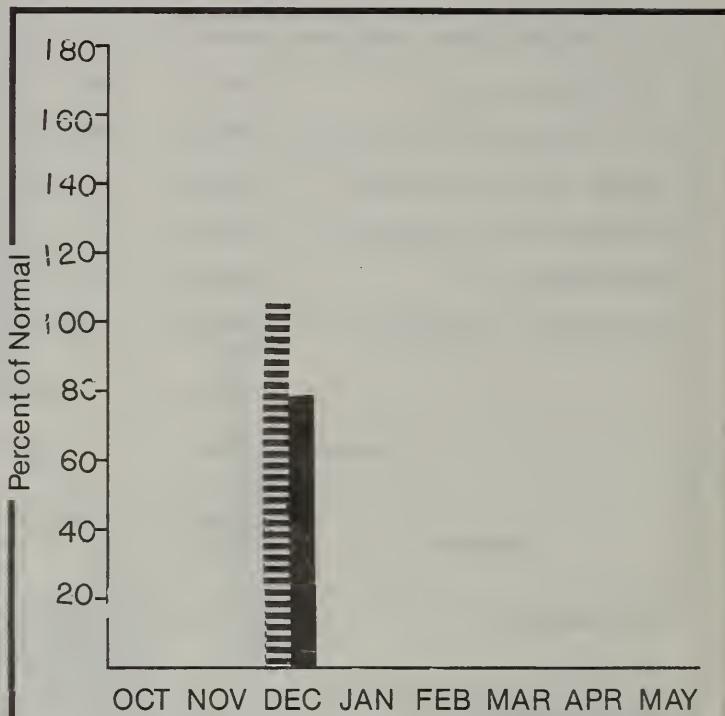
Maximum

Average

Minimum

Current

**Precipitation\*** (percent of normal)



\*Based on selected stations



Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snowpack accumulations for January 1 are well below average to below average. The Carson River Basin has about 75% of the January 1 average and 461% of the water content present last year at this time. The Walker River Basin presently has 64% of average and 446% of last year. December precipitation in the Carson-Walker Basins was 105% of average and 503% of last year. Precipitation since October 1, 1987 is 78% of average and 498% of last year's total precipitation figures at this time. Reservoir storage is 54% of average. Total storage for Bridgeport, Lahontan and Topaz is 115,800 acre feet. Streamflow forecasts indicate below average flows for the forecast period. The Carson River near Carson City is expected to flow at 70% of normal.

For more information contact your local Soil Conservation Service office.

## CARSON &amp; WALKER BASINS

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
EF CARSON RIVER nr Gardnerville, Nv	APR-JUL	198.4	163.0	82	240.0	121	90.0	45
WF CARSON RIVER at Woodfords, Ca	APR-JUL	56.7	47.0	83	70.0	123	25.0	44
CARSON RIVER near Carson City, Nv	APR-JUL	198.3	139.0	70	280.0	141	45.0	23
CARSON RIVER near Ft. Churchill, Nv	APR-JUL	182.4	124.0	68	275.0	151	30.0	16
EAST WALKER RIVER nr Bridgeport	2 APR-AUG	76.8	55.0	72	110.0	143	10.0	13
WEST WALKER RIVER near Coleville, Ca	APR-JUL	154.6	110.0	71	195.0	126	25.0	16
WALKER LAKE RISE (LOW 2/1/87)	LOW-HIG	-0.0		3333				

## RESERVOIR STORAGE

(1000AF)

## WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			AVG'D	LAST YR.
BRIDGEPORT RESERVOIR	42.5	8.9	29.1	24.0	E. CARSON RIVER	4	426	77
LAHONTAN RESERVOIR	295.1	98.2	169.4	170.4	W. CARSON RIVER	3	649	80
TOPAZ RESERVOIR	59.4	8.7	26.2	21.5	CARSON Rv. at Carson City	2	395	82
					CARSON Rv. at Ft. Churchi	2	395	82
					E. WALKER Rv. nr Bridgepo	5	436	60
					W. WALKER Rv. nr Colevill	6	446	64
					WALKER LAKE RISE	6	446	64

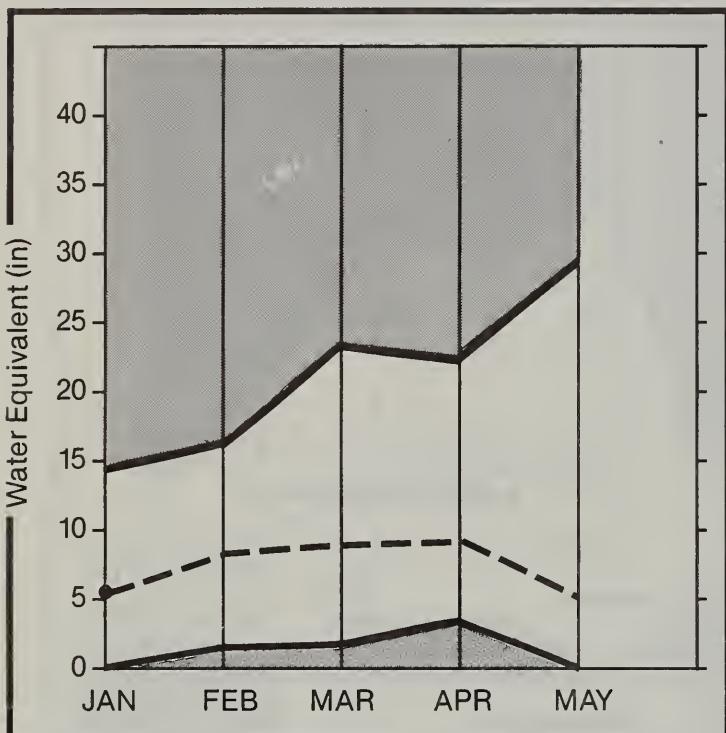
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

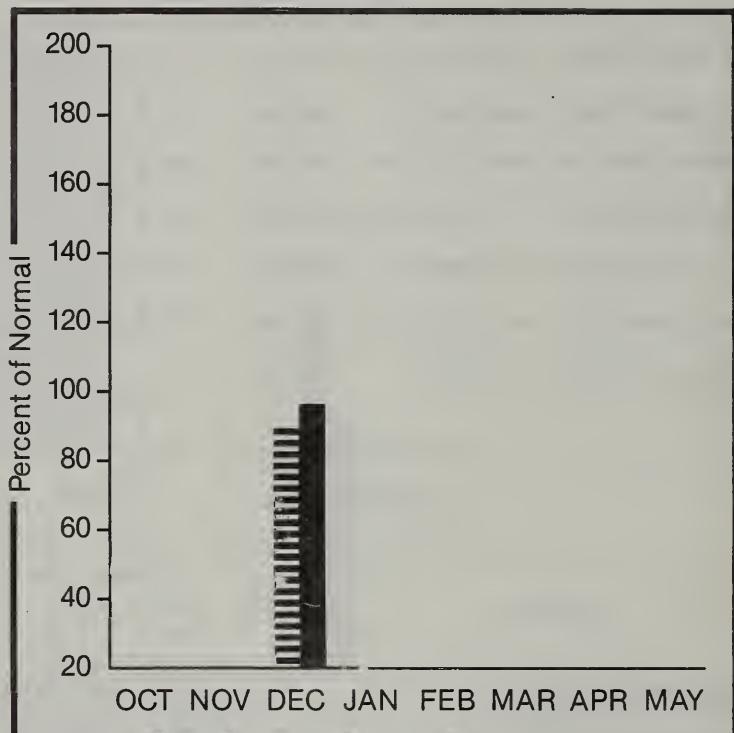
The average is computed for the 1961-85 base period.

## HUMBOLDT BASIN

Mountain snowpack\* (inches)



Precipitation\* (percent of normal)



\*Based on selected stations

\*Based on selected stations

Maximum

Average

Minimum

Current

Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snowpack accumulations for January 1 are slightly above average. The Upper Humboldt River Basin has about 104% of the January 1 average and 232% of the water content present last year at this time. The Lower Humboldt River Basin presently has 110% of average and 326% of last year. December precipitation in the Humboldt River Basin was 89% of average and 787% of last year. Precipitation since October 1, 1987 is 96% of average and 300% of last year's total precipitation figures at this time. Reservoir storage is 59% of average. Total storage for Rye Patch Reservoir is 58,900 acre feet. Streamflow forecasts indicate below average flows for the forecast period. The Humboldt River at Palisade is expected to flow at 80% of normal.

For more information contact your local Soil Conservation Service office.

## HUMBOLDT BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HUMBOLDT RIVER at Palisade	APR-JUL	269.0	215.0	80	465.0	173	50.0	19
HUMBOLDT RIVER at Comus	APR-JUL	229.1	176.0	77	460.0	201	45.0	20
S FORK HUMBOLDT RIVER at Dixie	APR-JUL	71.5	58.0	81	120.0	168	10.0	14
NF HUMBOLDT RIVER at Devils Gate	APR-JUL	34.3	25.0	73	60.0	175	7.0	20
MARY'S RIVER nr Deeth	APR-JUL	24.4	18.5	76	35.0	143	5.0	20
MARTIN CREEK nr Paradise Nv	APR-JUL	19.0	16.1	85	30.0	158	5.0	26
LAMOILLE CREEK nr Lamoille	APR-JUL	29.5	28.8	98	45.0	153	15.0	51
REESE RIVER nr Ione Nv	APR-JUL	7.8	6.5	83	15.0	192	2.0	26
L. HUMBOLDT RIVER nr Paradise Valley	APR-JUL	12.5	10.0	80	20.0	160	3.0	24
ROCK CREEK nr Battle Mtn.	APR-JUL	22.0	14.3	65	35.0	159	4.0	18

## RESERVOIR STORAGE (1000AF) | WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	WATERSHED	NO. COURSES	THIS YEAR AS % OF
	THIS YEAR	LAST YEAR	Avg.	Avg'D	LAST YR. AVERAGE
RYE PATCH RESERVOIR	194.3	58.9	133.2	99.0	LAMOILLE CREEK 3 216 111
					S. FORK HUMBOLDT 6 227 105
					MARY'S RIVER 5 222 92
					N. FORK HUMBOLDT 7 237 93
					HUMBOLDT Rv. at Palisades 11 213 97
					HUMBOLDT RIVER at Comus 11 213 97
					LITTLE HUMBOLDT RIVER 3 134 56
					MARTIN CREEK 4 137 60
					REESE RIVER 2 0 368
					ROCK CREEK 3 163 80

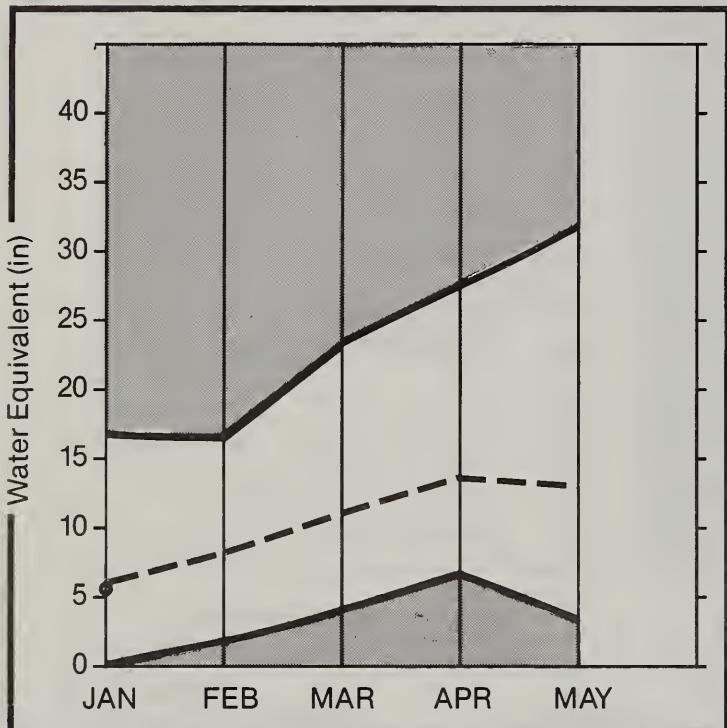
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

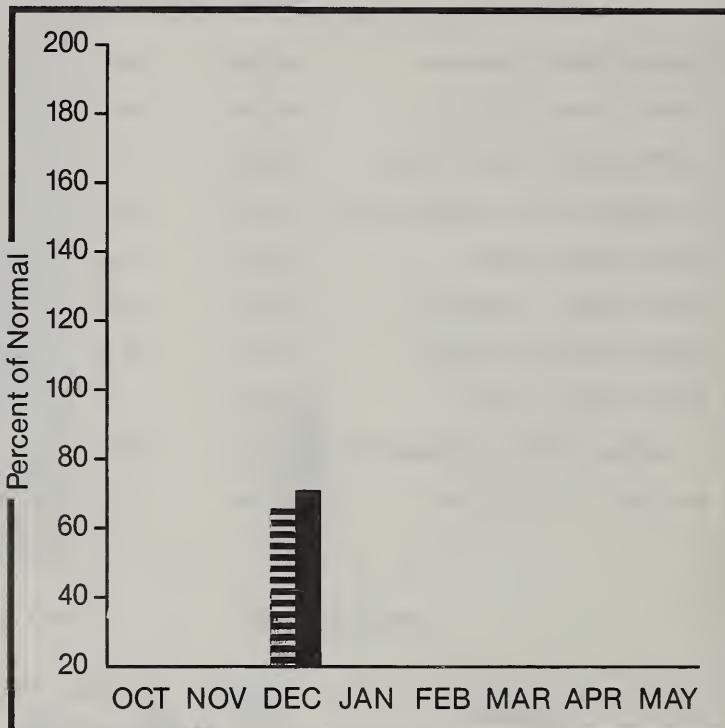
The average is computed for the 1961-85 base period.

## SNAKE & Owyhee Basins

Mountain snowpack\* (inches)



Precipitation\* (percent of normal)



\*Based on selected stations

\*Based on selected stations

Maximum

Average

Minimum

Current

Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snowpack accumulations for January 1 are slightly below average. The Snake River Basin has about 91% of the January 1 average and 231% of the water content present last year at this time. The Owyhee River Basin presently has 96% of average and 209% of last year. December precipitation in the Snake-Owyhee Basins was 65% of average and 719% of last year. Precipitation since October 1, 1987 is 71% of average and 222% of last year's total precipitation figures at this time. Reservoir storage is 75% of average. Total storage for Wildhorse Reservoir is 19200 acre feet. Streamflow forecasts indicate below average flows for the forecast period. The Owyhee River near Owyhee is expected to flow at 71% of average.

For more information contact your local Soil Conservation Service office.

## SNAKE &amp; Owyhee Basins

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OWYHEE RIVER near Gold Creek	MAR-JUL	36.4	25.8	71	52.0	143	8.0	22
OWYHEE RIVER nr Owyhee	APR-JUL	86.0	61.0	71	125.0	145	15.0	17
S FORK Owyhee nr White Rock, Nv	APR-JUL	83.0	59.0	71	120.0	145	15.0	18
SALMON FALLS CK nr San Jacinto	MAR-JUL	97.0	80.0	82	125.0	129	35.0	36

## RESERVOIR STORAGE (1000AF) | WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			AVG'D	LAST YR.
WILDHORSE RESERVOIR	71.5	19.2	39.4	25.6	OWYHEE RIVER nr Owyhee	7	185	80
					OWYHEE Rv. nr Gold Creek	2	190	73
					S. FORK Owyhee RIVER	7	185	80
					SALMON FALLS CREEK	4	210	86

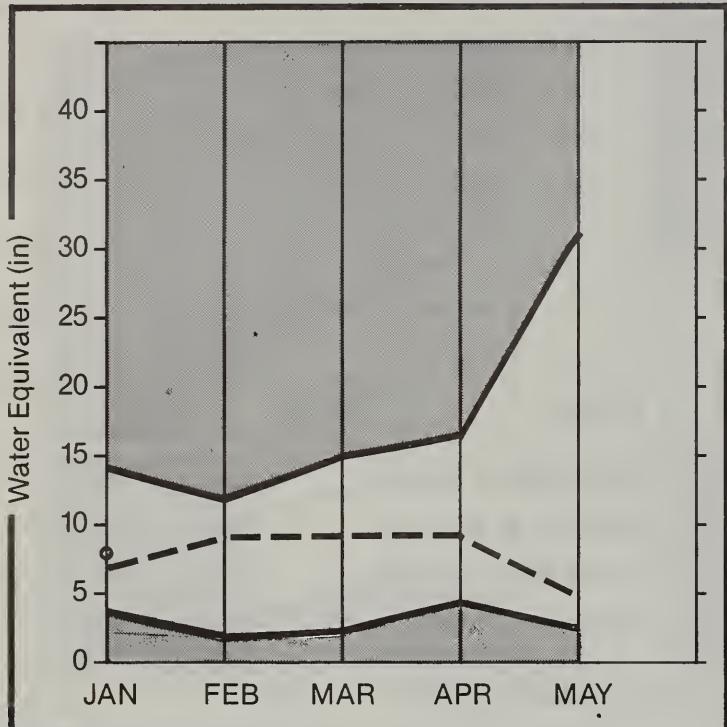
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

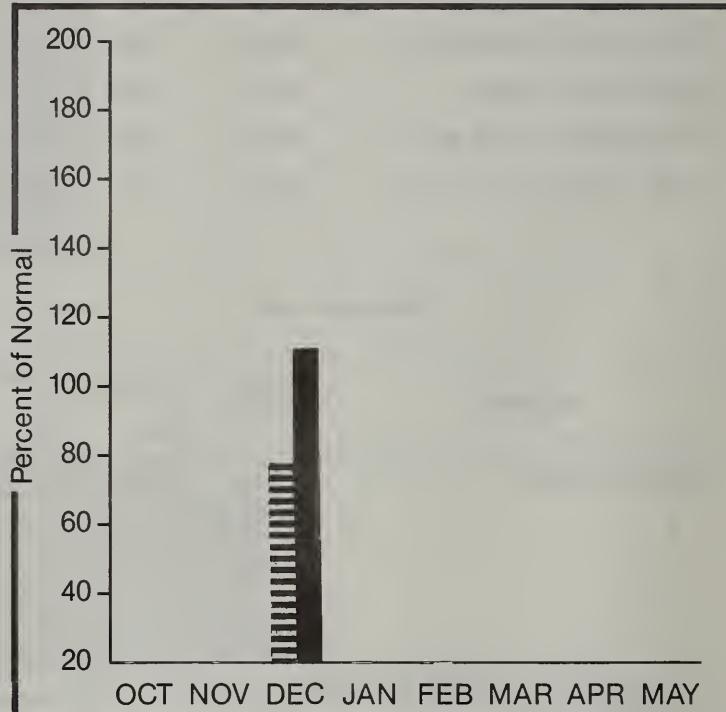
The average is computed for the 1961-85 base period.

## EASTERN NEVADA

Mountain snowpack\* (inches)



Precipitation\* (percent of normal)



\*Based on selected stations

\*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



### WATER SUPPLY OUTLOOK:

Snowpack accumulations for January 1 are above average based on SNOTEL (SNOW TELEmetry) information. The Eastern Nevada Basin has about 119% of the January 1 average and 505% of the water content present last year at this time. December precipitation in the Eastern Nevada Basin was 76% of average and 866% of last year. Precipitation since October 1, 1987 is 110% of average and 304% of last year's total precipitation figures at this time. Streamflow forecasts indicate near average flows for the forecast period. The Franklin River near Arthur is expected to flow at 109% of normal.

For more information contact your local Soil Conservation Service office.

## EASTERN NEVADA

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
STEPTOE CREEK nr Ely	APR-JUL	3.2	3.3	102	6.0	186	1.0	31
KINGSTON CREEK nr Austin, Nv	APR-JUL	4.2	4.1	97	8.0	190	1.0	24
FRANKLIN RIVER nr Arthur	APR-JUL	6.9	7.5	109	15.0	219	2.0	29

## RESERVOIR STORAGE (1000AF) | WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	THIS YEAR	LAST YEAR	** USEABLE STORAGE ** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
							LAST YR.	AVERAGE
					FRANKLIN RIVER	1	283	144
					KINGSTON CREEK	2	0	368
					EASTERN NEVADA	0	0	0
					STEPTOE VALLEY	0	0	0

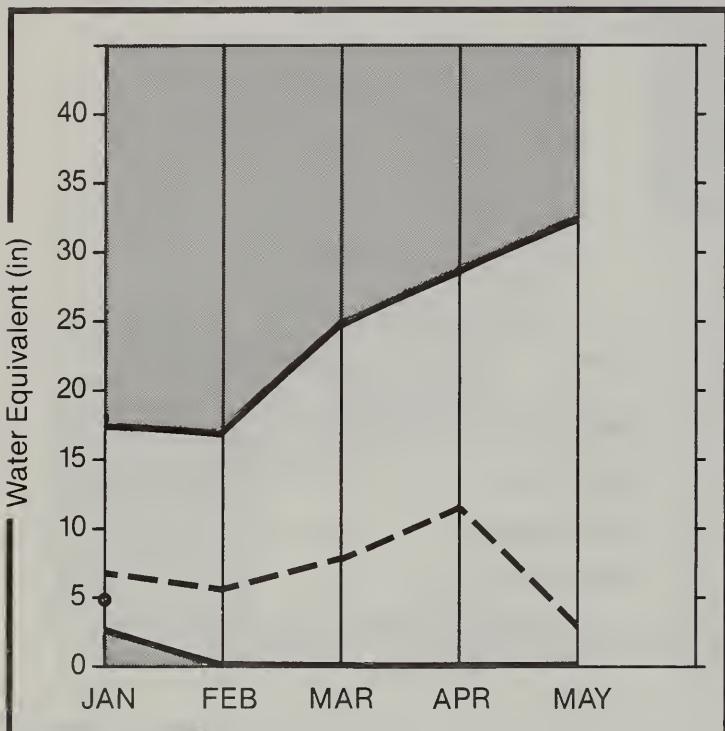
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

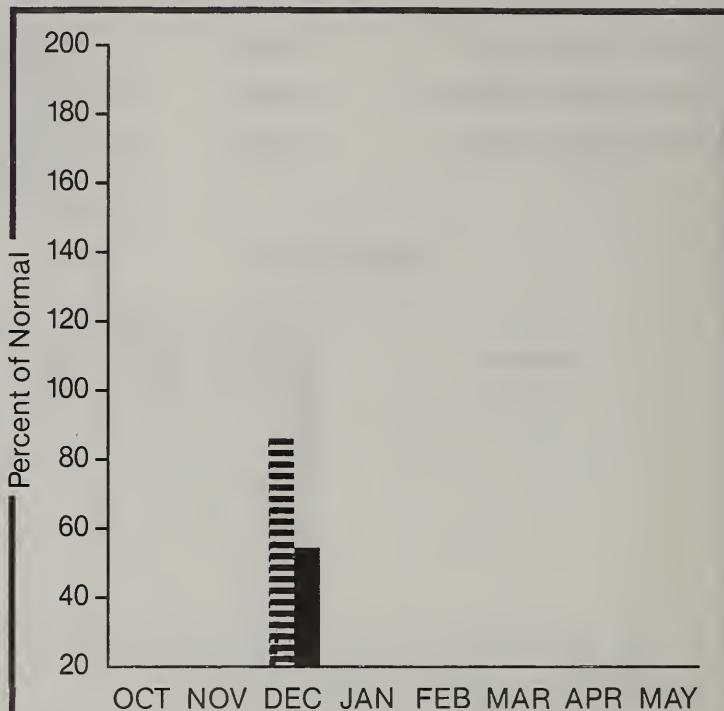
The average is computed for the 1961-85 base period.

## NORTHERN GREAT BASIN

Mountain snowpack\* (inches)



Precipitation\* (percent of normal)



\*Based on selected stations

\*Based on selected stations

Maximum

Average

Minimum

Current



Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snowpack accumulations for January 1 are well below average. The Northern Great Basin has about 68% of the January 1 average and 147% of the water content present last year at this time. December precipitation in the Northern Great Basin was 85% of average and 234% of last year. Precipitation since October 1, 1987 is 53% of average and 139% of last year's total precipitation figures at this time. Streamflow forecasts indicate below average flows for the forecast period. Bidwell Creek near Fort Bidwell is expected to flow at 80% of normal.

For more information contact your local Soil Conservation Service office.

## NORTHERN GREAT BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIDWELL CREEK nr Fort Bidwell	APR-JUL	12.0	9.6	80	20.0	167	4.0	33
DEEP CREEK nr Cedarville, Ca	APR-JUL	3.6	2.6	72	5.0	139	1.0	28
EAGLE CREEK nr Eagleville, Ca	APR-JUL	4.3	3.1	72	6.0	140	1.0	23
HILL CREEK nr Cedarville, Ca	APR-JUL	4.1	3.3	80	6.0	146	1.0	24
QUINN RIVER nr McDermitt, Nv	APR-JUL	16.0	9.8	61	25.0	156	4.0	25
E. FORK QUINN RIVER nr McDermitt	APR-JUL	10.4	6.2	60	15.0	144	2.0	19
McDERMITT CREEK nr McDermitt	APR-JUL	14.4	9.1	63	20.0	139	4.0	28

## RESERVOIR STORAGE

(1000AF)

## WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE			WATERSHED	NO. COURSES	THIS YEAR AS % OF	
	THIS YEAR	LAST YEAR	AVG.	Avg'D			LAST YR.	AVERAGE
					BIDWELL	0	0	0
					HILL CREEK	0	0	0
					DEEP CREEK	0	0	0
					EAGLE CREEK	0	0	0
					QUINN RIVER	1	147	68
					E. FORK QUINN	1	147	68
					McDERMITT CREEK	1	147	68

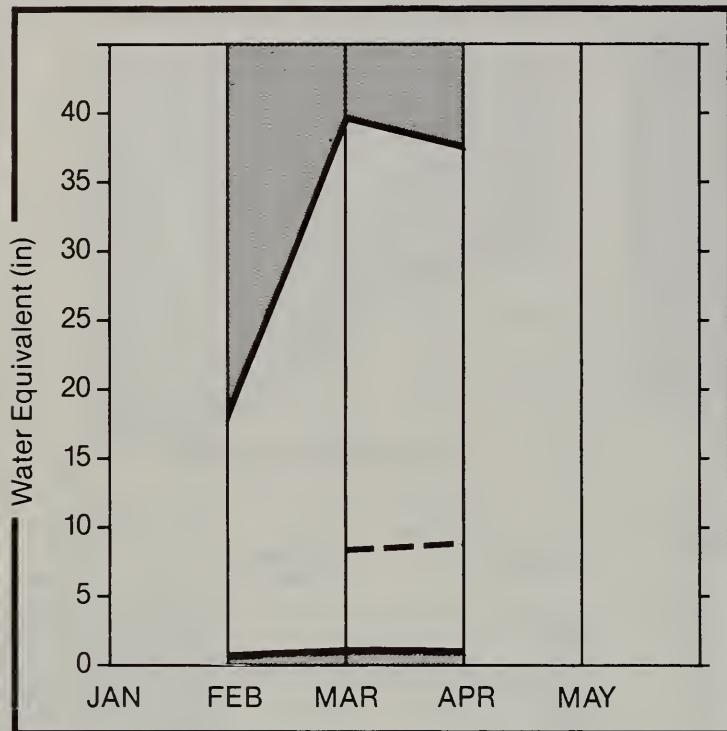
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

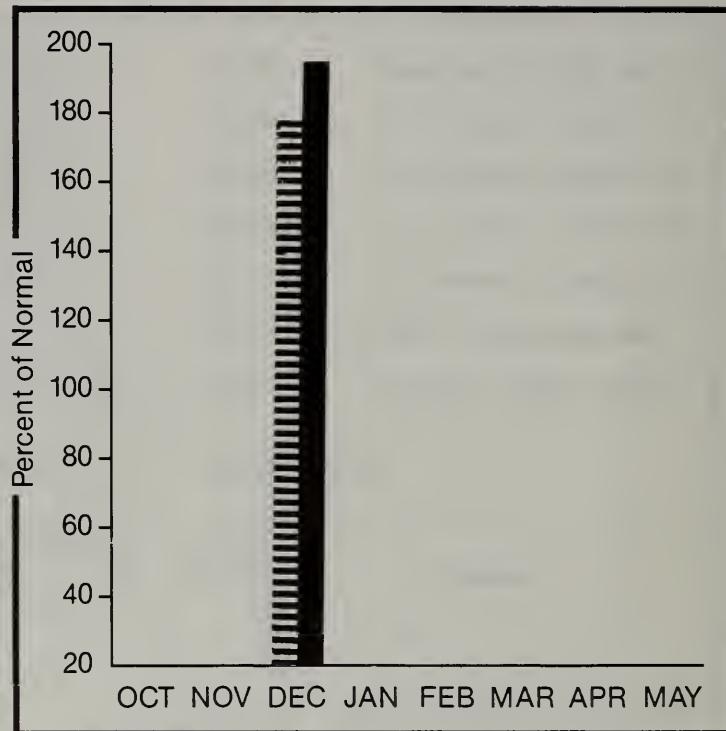
The average is computed for the 1961-85 base period.

## SOUTHERN NEVADA

Mountain snowpack\* (inches)



Precipitation\* (percent of normal)



\*Based on selected stations

\*Based on selected stations

Maximum

Average



Minimum

Current

Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snowpack accumulations for the Virgin River on January 1 are above average. The Virgin River snowpack is about 118% of the January 1 average and 279% of the water content present last year at this time. December precipitation in the Southern Nevada Basin was 177% of average and 133% of last year. Precipitation since October 1, 1987 is 194% of average and 258% of last year's total precipitation figures at this time. Reservoir storage is 127% of average. Total storate for Lake Mohave and Lake Mead is 26,049,400 acre feet. Streamflow forecasts indicate the Virgin River near Hurricane, UT will flow at 132% of normal during the April - July forecast period.

For more information contact your local Soil Conservation Service office.

## SOUTHERN NEVADA

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
VIRGIN RIVER near Hurricane, UT	APR-JUL	68.0	90.0	132	126.0	185	52.0	76
LAKE POWELL inflow	APR-JUL	8086.0	6800.0	84	10823.0	134	3340.0	41

## RESERVOIR STORAGE

(1000AF)

## WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			Avg'D	LAST YR.
LAKE MOHAVE	1810.0	1496.4	1524.0	---	VIRGIN Rv. at Littlefield	4	279	118
LAKE MEAD	26159.0	24533.0	24232.0	19301.0	VIRGIN Rv. at Hurricane,	4	279	118

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

# SNOW DATA MEASUREMENTS

SNOW COURSE	EL ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
-------------	--------------	------	------------	---------------	-----------	-----------------

## LAKE TAHOE

ECHO PEAK (CA)	7800	1/01/88	---	9.2E	1.5	16.6
ECHO SUMMIT (CA)	7450	12/28/87	33	8.4	1.3	12.5
FALLEN LEAF (CA)	6300	1/01/88	---	2.4E	.4	3.6
FREEL BENCH (CA)	7300	1/01/88	---	1.6E	.0	5.5
HAGANS MEADOW (CA)	8000	1/01/88	---	3.4E	.7	7.6
HEAVENLY VALLEY (CA)	8850	1/01/88	---	8.6E	1.7	11.0
RICHARDSONS #2 (CA)	6500	1/02/88	18	3.2	.0	6.0
RUBICON #2 (CA)	7500	1/01/88	---	7.0E	1.1	12.0
TAHOE CITY CROSS(CA)	6750	1/02/88	21	4.2	.0	6.6
TRUCKEE, UPPER (CA)	6400	1/01/88	---	1.3E	.0	4.5
WARD CREEK #2 (CA)	7000	1/01/88	---	9.7E	4.9	15.4
WARD CREEK #3 (CA)	6750	1/01/88	---	9.3E	3.3	13.0

## TRUCKEE RIVER

BOCA #2 (CA)	5900	1/01/88	---	2.5E	--	2.8
BROCKWAY SUMMIT (CA)	7100	1/03/88	27	5.3	.0	8.0
CASTLE CREEK (CA)	7400	1/04/88	77	18.9	--	22.3
DONNER PARK #2 (CA)	6000	1/01/88	---	3.4E	--	--
DONNER SUMMIT (CA)	6900	1/07/88	65	19.0	--	14.6
FORDYCE LAKE (CA)	6500	1/06/88	49	14.0	--	16.2
FURNACE FLAT (CA)	6700	1/06/88	56	15.7	--	19.6
INDEPENDENCE CAMP CA	7000	1/01/88	---	5.7E	2.1	7.5
INDEPENDENCE CREEK	6500	1/01/88	---	3.4E	.0	5.1
INDEPENDENCE LAKE CA	8450	1/01/88	---	11.7E	4.2	15.5
SAGEHEN CREEK (CA)	6500	1/01/88	---	4.2E	.0	4.0
SQUAW VALLEY #2 (CA)	7500	1/01/88	---	16.7E	4.8	18.1
SQUAW VALLEY G.C.,CA	8200	1/01/88	---	15.9E	3.2	23.5
TAHOE CITY CROSS(CA)	6750	1/02/88	21	4.2	.0	6.6
TRUCKEE #2 (CA)	6400	1/03/88	21	4.2	.0	5.6

## CARSON RIVER

BLUE LAKES (CA)	8000	1/05/88	54	11.8	1.5	14.4
CARSON PASS, UP (CA)	8600	1/07/88	54	11.5	2.3	12.7
EBBETTS PASS #2 (CA)	8700	1/01/88	---	10.2E	2.7	16.2
POISON FLAT #2 (CA)	7900	1/01/88	---	5.2E	2.8	6.4
WET MEADOWS #2 (CA)	8100	1/01/88	---	11.6E	2.1	13.1

# SNOW DATA MEASUREMENTS (CONT)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
<b>WALKER RIVER</b>						
LEAVITT MEADOWS (CA)	7200	1/01/88	---	3.7E	.7	2.8
LOBDELL LAKE (CA)	9200	1/01/88	---	3.5E	.2	7.0
SONORA PASS (CA)	8800	1/01/88	---	6.2E	2.1	10.2
VIRGINIA LAKES (CA)	9500	1/01/88	---	3.7E	1.0	6.5
VIRGINIA LAKES RIDGE	9200	1/01/88	---	4.3E	.9	7.7
<b>SNAKE RIVER</b>						
BEAR CREEK	7800	1/01/88	---	6.5E	2.3	8.9
GOAT CREEK	8800	1/01/88	---	6.9E	3.3	7.4
HUMMINGBIRD SPRINGS	8950	1/01/88	---	11.2E	4.4	10.3
JAKES CREEK AM	7000	12/29/87	13	1.7	--	--
MERRIT MOUNTAIN AM	7000	12/29/87	24	4.3	.0	--
POLE CREEK R.S.	8330	1/01/88	---	8.9E	4.2	8.6
SEVENTYSIX CREEK	7100	1/01/88	---	4.6E	3.0	6.3
STAG MOUNTAIN AM	7700	12/29/87	9	1.6	.0	2.3
<b>OWYHEE RIVER</b>						
BIG BEND	6700	1/04/88	16	2.8	.9	3.9
COLUMBIA BASIN AM	6650	12/29/87	29	5.2	.0	.4
FAWN CREEK #2	7050	1/01/88	---	1.8E	--	9.4
GOLD CREEK	6600	1/04/88	12	1.9	.6	2.5
JACK CREEK, LOWER	6800	1/07/88	17	3.0	.8	1.1
JACK CREEK, UPPER	7250	1/05/88	24	4.2	1.9	2.9
JACK CREEK #2, UPPER	7280	1/05/88	30	6.3	--	5.4
JACKS PEAK	8420	1/01/88	---	6.5E	4.4	9.2
LAUREL DRAW	6700	1/01/88	---	3.2E	3.3	3.7
TAYLOR CANYON	6200	1/06/88	14	2.3E	.5	2.5
<b>HUMBOLDT RIVER, UPPER</b>						
CORRAL CANYON	8500	1/01/88	---	.0E	1.6	4.7
DORSEY BASIN	8100	1/01/88	---	6.5E	2.3	4.5
GREEN MOUNTAIN	8000	1/01/88	---	7.1E	1.5	5.2
LAMOILLE #1	7100	1/01/88	---	6.3E	.0	3.8
LAMOILLE #3	7700	1/01/88	---	5.2E	3.4	5.6
LAMOILLE #5	8700	1/01/88	---	14.2E	8.5	13.8
SMITH CREEK	7700	1/01/88	---	7.5E	--	--
TREMEWAN RANCH	5700	1/04/88	9	.9	.0	1.1

# SNOW DATA MEASUREMENTS (CONT)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
<hr/>						
HUMBOLDT RIVER, LOWER						
BIG CREEK MINE	7600	1/01/88	---	5.1E	.0	2.1
BIG CREEK, UPPER	7800	1/01/88	---	10.0E	.0	2.0
BUCKSKIN, LOWER	6700	1/01/88	---	.0E	.0	3.0
GRANITE PEAK	7800	1/01/88	---	5.6E	3.8	8.2
LAMANCE CREEK	6000	1/01/88	---	2.6E	2.3	3.5
MARTIN CREEK	6700	1/01/88	---	2.9E	2.0	3.8
MIDAS	7200	1/01/88	---	.2E	.0	1.3
TOE JAM AM	AM 7700	12/29/87	24	4.3	--	4.6

# SNOW CORE MEASUREMENTS - DRI-ASC

DATE Dec. Jan.	SITE	ELEVATION FEET	LOCATION	SNOW IN.	WATER IN.	DENSITY
31	JC	5800	Clear Creek	3.5	0.5	.14
31	SS	7260	Spooner Summit	11.0	1.9	.17
31	FT	5250	Cliff Ranch, Franktown	5.0	0.7	.14
1	LV	6540	Little Valley	9.0	1.6	.18
31	DC	5160	Davis Creek	4.5	0.7	.16
31	8	4590	Jct. 395 & NV 27	2.5	0.4	.16
31	6	5110	Lancer	4.0	0.6	.15
31	4	5670	Whites Creek	5.0	0.7	.14
31	R	5700	Evergreen Hills Rd.	7.0	1.2	.17
31	2	6000	Jones Creek	8.0	1.2	.15
31	0	6400	RNR Forestry Site	11.0	1.8	.16
1	N	7060	Reindeer Lodge	14.0	2.9	.21
1	M	7440	Galena Creek	24.0	4.9	.20
1	K	7620	Sky Tavern	20.0	4.8	.24
1	G	8280	Mt. Rose Resort	31.0	7.4	.24
1	D	8820	Tamarack Lake	30.5	7.5	.25
31	A	8540	Tahoe Meadows	38.0	9.0	.24
31	U	8000	Below Incline Lake	19.0	4.8	.25
31	V	7300	Apollo Way	12.0	2.3	.19
31	Z	6235	Third & Incline Creeks	4.0	0.7	.18
31	BS	7200	Brockway Summit	21.0	4.0	.19
31	NS	6320	North Star Fire Dept.	13.0	2.5	.19
31	TRK	5900	Truckee - Tahoe Airport	9.5	1.5	.16
31	CK	6540	Cabin Creek	22.0	4.7	.21
31	SV	6240	Squaw Valley Fire Dept.	21.0	4.7	.22
31	TC	6200	Thunder Cliff	21.0	4.6	.22
31	TP	6240	Tahoe City	18.0	3.5	.19
31	BF	6200	Bennett Flat	19.0	3.6	.19
31	AC	6960	Alder Creek	37.0	8.1	.22
31	HM	5850	Hobart Mills	13.0	2.2	.17
31	SA	6340	Sagehen Creek	27.0	(5.9)	(.22)
31	LT	6410	Henness Past Jct.	21.0	3.8	.18
	FL	6200	Fuller Lake			
31	JL	6000	Joy Lake	6.5	1.0	.15



## The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

### STATE

California Cooperative Snow Surveys  
California Department of Parks and Recreation  
California Department of Water Resources  
Colorado River Commission of Nevada  
Idaho Cooperative Snow Surveys  
Nevada Association of Conservation Districts  
Nevada Department of Conservation & Natural Resources  
    Division of Water Resources  
    Nevada State Forester  
    Division of Conservation Districts  
Oregon Cooperative Snow Surveys  
University of Nevada, Desert Research Institute  
Utah Cooperative Snow Surveys

### FEDERAL

Bureau of Reclamation  
Forest Service  
Geological Survey  
Soil Conservation Service  
U.S. District Court - Federal Water Master  
NOAA, National Weather Service

### PRIVATE

Nevada Irrigation District  
Owyhee Project North Board of Control  
Owyhee Project South Board of Control  
Pacific Gas and Electric Company  
Pershing County Water Conservation District  
Sierra Pacific Power Company  
Truckee - Carson Irrigation District  
Walker River Irrigation District  
Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
1201 TERMINAL WAY, SECOND FLOOR  
RENO, NEVADA 89502

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

THIRD CLASS BULK RATE  
POSTAGE AND FEES PAID  
USDA • SCS  
PERMIT NO G-267

# THIRD CLASS MAIL

## Nevada Water Supply Outlook

and

Federal — State — Private  
Cooperative Snow Surveys

USDA-NAT'L AGRICULTURAL LIB.  
SERIALS CONTROL  
ROOM 002

BELTSVILLE, MD 20705



SOIL CONSERVATION SERVICE